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			SIT	E 1020			B COR				CORED 0.0 - 7.8 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
3		('	-	꽃			3	-		5Y 5/3	CLAY and NANNOFOSSIL CLAY
			1		1		> > > > > > > > > > > > > > > > > > >	!		10Y 5/1	Major Lithologies: This core consists of olive (5Y 5/3) NANNOFOSSIL CLAY and light grayish olive (10Y 5/1) CLAY. Color and compositional changes are gradational.
}	}	>	2				3 *****		S	5Y 5/3	General Description: The sediment is slightly bioturbated. A
			-	<u>-</u>	2		3				few open burrows are found in Section 1.
	[]		3				3				
}	}		-			ıry	3				
}	}	}	4		3	Quaternary	~ ~ @		S D		
5		}	-			g	(P		ı		
}			5				33			10Y	
{	}	{	-		4		} }			5/1	
}	}		6 -				3				
}	$ \rangle $		-				3				
}	}		-		5		3				
{	{		-				3				
			-		CC		3		М		

			SIT	E 1020		LE	B COR	E :			CORED 7.8 - 17.3 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450-500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1 1.5		0 200 44	2 3 1 2 6 7 6 7 7 7 8 7 7 7 7 7 7 7 7 7 7 7 7 7		1 2 3 4 5 6 CC	Quaternary	***	MM .	5 5 5 M	10Y 5/1 10Y 5/2 10Y 5/1	CLAY WITH NANNOFOSSILS Major Lithology: This core consists of grayish olive to light grayish olive (10Y 5/1 to 10Y 5/2) CLAY WITH NANNOFOSSILS. Color is mottled and boundaries are gradational. Minor Lithologies: Several thin green color bands of altered VOLCANIC ASH occur throughout the main lithology. Thin layers found in Section 1, 40-45 cm, Section 2, 40-47 cm, Section 3, 85 cm, and Section 4, 140 cm, consists of medium dark gray (N4) very fine SAND. General Description: The sediment is moderately bioturbated. Zoophycos are common in the lower portion of the core.

			SIT	E 1020	HO	LE	B COR	Ε :	3H		CORED 17.3 - 26.8 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1 1.5	5 10	0 100 2	2 3 4 5 6 8 8		3 3 3 5 5 6 6 6 CCC	Quaternary		00	s D M	10Y 5/1	CLAY Major Lithology: This core consists of grayish olive (10Y 5/1) CLAY. Minor Lithology: Many thin green color bands of altered ASH occur throughout the core. General Description: The sediment is slightly bioturbated. Pyritized burrows are common.

			SIT	E 1020	НО	LE	в сс	RI	Ε4	4H		CORED 26.8 - 36.3 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section		Structu	re	Disturb	Sample	Color	Description
			1		1					S S	10Y 5/1	CLAY and CLAYEY NANNOFOSSIL OOZE Major Lithologies: This core consists mainly of light grayish olive to pale olive (10Y 5/1 to 10Y 6/2) CLAY. Near the top of Section 1 is a thin interval of CLAYEY NANNOFOSSIL OOZE containing
- Marine			3 3 4 5 5 7 7 7 7 9 9 7 9 9 7 9 9 9 9 9 9 9 9		3 4 5 7	Quaternary		(P)		<i>o</i>	10Y 6/1 To 10Y 6/2	NANNOFOSSIL OOZE containing about 65% nannofossils. Minor Lithologies: Section 2, 13-19 cm, contains thin lamina of SILT composed mainly of quartz and feldspar. Scattered throughout the core are very thin color bands of altered VOLCANIC ASH. General Description: The sediment is slightly to homogeneously bioturbated.
1.5 1.75	5 10 0) 200 40	10		СС					М		

			SIT	E 1020		LE	В (COR				CORED 36.3 - 45.8 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Struc	ture	Disturb	Sample	Color	Description
	7	} '	T:	4	П		<u> </u>		≷			NANNOFOSSIL CLAY
	My My Manney May My Mark		3_		2	ary		»» »		<i>S</i> -	10Y 5/1	Major Lithology: This core consists of light grayish olive to pale olive (10Y 5/1 to 10Y 6/1) NANNOFOSSIL CLAY. Abundant pyritized burrows are present in the lower portion of the core. Minor Lithology: A lens of CLAYEY SILT WITH SAND occurs at Section 4, 128. Thin and faint color laminations of altered ASH occur throughout the core. General Description: The sediment is slightly to moderately bioturbated. Zoophycos are common in Sections 2 through 4.
}	}		5	<u> </u>	4	Quaternary	3	>>>				
	Ş	}	-	호	4	Que	3					
7		>	6				8 }			S		
3	}	>	-	죠			3					
{	~	{	-		5		3					
3	7	}	7	1.1. 1.1.			— ⅔	(P) (P)				
5	\ \{\ \}	}	-		Н		- }				10Y 6/1	
}	{	}	8_	<u> </u>			3					
	J. M.	}			6		— » » » » » » » » »	P				
	1	{	9	<u></u>	Н							
 	>			호 호	7		3				10Y	
	10 12.5) 50 10	10	立	СС		3			М	5/1	

			SIT	E 1020	НО	LE	B COR	ΕŒ	3H		CORED 45.8 - 55.3 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
Mharaman Amman Amman Amman			3		2		- -			10Y 5/1	CLAY WITH FORAMINIFERS and CLAY WITH NANNOFOSSILS Major Lithologies: This core consists of light grayish olive (10Y 5/1) to pale olive (10Y 6/1) CLAY WITH FORAMINIFERS and CLAY WITH NANNOFOSSILS. Thin lighter color bands are indicated in the Structure column. General Description: The entire core is homogeneous to slightly mottled. Slight bioturbation is evident in Sections 5 and 6.
			2		4	Quaternary			S _I	10Y 6/1	
1.6 1.7	0 10 1	10 20 3	7		5 6 7		» » » »		S	10Y 5/1	

			SIT	E 1020		LE	B COR				CORED 55.3 - 64.8 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
(g/cm³)	(450-500 nm)	(10° SI)	3 3 5 7 7 8 8 9 1 10 10 10		3 3 4 5 6	Quaternary		G		40%	CLAY and NANNOFOSSIL CLAY WITH FORAMINIFERS Major Lithologies: This core consists of light grayish olive (10Y 5/1) CLAY to NANNOFOSSIL CLAY WITH FORAMINIFERS. Color variations are very subtle and gradual. Minor Lithologies: Small, sub-cm, pods of fine SAND are present in Sections, 3, 4, and 5. A 1×1×2 cm pyrite concretion is present at Section 1, 60 cm. General Description: The core is homogeneous to slightly bioturbated.
1.5 1.75	5 10	10 20 3	30						M		

			SIT	E 1020		LE	B COR		вн		CORED 64.8 - 74.3 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
(g/cm²)	My my many many many		2 1		2		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	M	8 8		CLAY WITH DIATOMS AND SILT Major Lithology: This core consists of gray (5Y 5/1) CLAY WITH DIATOMS AND SILT. Some burrows are pyritized and a 2cm diameter pyrite concretion with pyritized foraminifers and burrows is present at Section 5, 70 cm. Minor Lithology: A distinct, thin bed of dark gray (5Y 4/1) SILTY CLAY occurs at Section 1, 31-34 cm. General Description: The core is slightly bioturbated throughout and contains Chondrites in Section 6.
1.5 2			5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		4 5 6 7	Quaternary	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		D S	5Y 5/1	

			SIT	E 1020	HO	LE	B COR				CORED 74.3 - 83.8 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		4					} (P)	MM	s ^{S C}	10Y 6/1	CLAY WITH DIATOMS OR NANNOFOSSILS and DOLOMITE WITH CLAY
		{	1_		1				3	10Y 5/1	Major Lithologies: This core consists of light grayish olive (10Y 5/1) to pale olive (10Y 6/1)
	\ \ \ \		2		2		} } } }			10Y 4/1	DOLOMITE WITH CLAY in the upper part and gray (5Y 5/1) to grayish olive (10Y 4/1) CLAY WITH DIATOMS OR NANNOFOSSILS in the lower part.
			3_							10Y 6/1	Minor Lithology: A thin bed of very light gray (10Y 7/1), moderately cemented DOLOMITE is present within the upper interval of
\{\}			4_		3		} } }			10Y 4/1	DOLOMITE WITH CLAY. General Description: The sediments are slightly bioturbated
		\$	-	4		lary	} } }		I		throughout. One large vertical burrow is surrounded by a 1 cm wide redox halo. Some burrows are slightly pyritized and a 2 cm diameter pyrite
}	}		5		4	Quaternary	; ; ;		S D		concretion is present near the top of the core.
		}	6				} } } }	i i i i			
	}		7		5		3 3			5Y 5/1	
			8				} } }				
}		<i>}</i>	-		6		— ¾		s		
	\	3	9	Y Y	7		} } }				
1.5 2	5 10 1	10 20 3	10 30	,	cc		}	}	М	10Y 4/1	

			<u> 511</u>	E 1020	HC	LE	В	COR		10H		CORED 83.8 - 93.3 mb
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Stru	cture	Disturb	Sample	Color	Description
		-20	2 3 3 5 5 5 5 6 5 6 5 6 5 6 5 6 6 6 6 6 6		2 2 3 3 3 3 5 5 5 6 6 6 6 7 7 CCC	Quaternary		P P P	MM M	S	10Y 5/1	DIATOM CLAY and CLAY WITH DIATOMS Major Lithologies: This core consists of light grayish olive (10Y 5/1) DIATOM CLAY to CLAY WITH DIATOMS. Irregular pyrite concretions are scattered through the core and dark gray (N4) pyritic beds and patches occur in Section 2. General Description: The sediments are slightly bioturbated throughout. Some burrows are pyritized.

			SIT	E 1020	HC	DLE	B COF		11H		CORED 93.3 - 102.8 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure		Sample	Color	Description
			Wei		2 2 5 5	Quaternary	Structure P A A B A B A B B A B B B B	000	Sam S	10Y 4/1 To 5GY 4/2	Description CLAY and CLAY WITH DIATOMS Major Lithologies: This core consists of light grayish olive (10Y 5/1) CLAY and grayish olive (10Y 4/1) to dark greenish gray (5GY 4/2) CLAY WITH DIATOMS. Pyrite concretions are distributed throughout. Minor Lithology: A 2-cm thick bed of dark gray (N4) VITRIC ASH WITH PYRITE occurs at Section 6, 140-142 cm. General Description: The sediments are mostly homogeneous and only display slight bioturbation in Sections 6 and 7.
 2	5 10 () 20 4	10 0	,	СС			⋛	М	5GY 4/1	

			SIT	E 1020	HC	DLE	B COR	E ·	12H		CORED 102.8 - 112.3 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			2		1		(P) (P) (S) (S) (S) (S) (S) (S) (S) (S) (S) (S	00000		10Y 5/1	CLAY Major Lithology: This core consists of light grayish olive to pale olive (10Y 5/1 to 10Y 6/1) CLAY. Color is mottled and boundaries are gradational. The slightly lighter color values (10Y 6/1) reflect a small increase in nannofossil content to about 5%. General Description: The sediment is moderately bioturbated. Zoophycos are common.
		}	4		3	nary	** ** ** ** **		S _I	10Y 6/1	
			5		5	Quaternary) ************************************		S	10Y 5/1	
1 2	5 10	0 20 4] :		.CC		33	İ	М		

			_	SITE	10	20	HOLE E	3	CORE	13H	CORED 112.3 - 121.8 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	SITE Graphic Lith.	Section	Age	Structure		Sample	Color	Description
1 2		- - - - - - - - - - - - - - - - - - -			1 1 4 4 4 5 5 5 5 5 6 CCC	Quatemary	(A)	ja a	s B	10Y 5/1	CLAY Major Lithology: This core consists of light grayish olive (10Y 5/1) CLAY. Color is slightly but uniformly mottled thoughout. Pyritized burrows and pyrite concretions are common. General Description: The sediment is moderately bioturbated.

			SIT	E 1020	HC	LE	ВС	OR		14H			CORED 121.8 - 131.3 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Struct	ure	Disturb	Sample		Color	Description
M	}	}					}					10Y 5/1	CLAY WITH NANNOFOSSILS AND DIATOMS, NANNOFOSSIL CLAY WITH DIATOMS and CLAY
1 3	}	}		<u> </u>	1		» }}					5Y 5/2	Major Lithologies:
WWW WWW			3		2		***************************************	(P)		S		10Y 5/1	This core consists of light grayish olive (10Y 5/1) CLAY WITH NANNOFOSSILS AND DIATOMS, olive gray (5Y 5/2) NANNOFOSSIL CLAY WITH DIATOMS, and light grayish olive to grayish olive (10Y 5/1 to 10Y 4/1) CLAY. Near the base of the core in Section 7 and CC, silt content increases slightly. General Description: The sediment is moderately bioturbated creating slightly mottled color variations.
3	}	}	4_				}	P			ŀ		oolor variations.
		}	5	V	4	Quaternary	>>			S	D	5Y 5/2	
My M			7		5	•	***	(0)		S	D	10Y 5/1	
1.6 1.7	5 10 0	0 25 5	9 -		7 CC		} }		1	М		10Y 4/1	

			SIT	E 1020	HO	LE	B COR	E '	15H		CORED 131.3 - 140.8 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	urb	Sample	Color	Description
	- Monthson		2		2		** ** ** ** ** ** ** ** ** ** ** ** **	/ //		10Y 5/1	CLAYEY NANNOFOSSIL OOZE and DIATOM CLAY Major Lithologies: This core is composed of pale olive (10Y 6/1) CLAYEY NANNOFOSSIL OOZE and light grayish olive to grayish olive (10Y 5/1 to 10Y 4/1) DIATOM CLAY. Color and compositional changes are gradational. General Description: The sediment is moderately bioturbated causing faint color mottling.
		}	4_		3	o.	33 33 33 33 33		S	10Y 6/1	
	My My My		5		5 6	late Pliocene			S	10Y 5/1	
1.6 1.8	8 10	0 50 1	9 -	V V V V V V V V V V V V V V V V V V V	7 CC		} } } }		М	10Y 4/1	

			SIT	E 1020	НО	LE	ВС	OR		16H		CORED 140.8 - 150.3 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Struct	ture	Disturb	Sample	Color	Description
	-		1		1		***************************************	⊕ ⊗ ⊕			10Y 5/1	CLAY WITH DIATOMS and DIATOM CLAY Major Lithologies: This core consists of grayish olive (10Y 5/1) DIATOM CLAY and pale olive (10Y 6/1) CLAY WITH DIATOMS. Color change is subtle and boundaries are gradational. General Description: The sediment is slightly to moderately bioturbated causing faint color mottling.
}			3	7 7 7 7 7 7 7 7 7 7 7	3		** ** ** ** ** ** ** ** ** ** ** ** **			S	10Y 6/1	bioturbated causing faint color motting.
			5		5	late Pliocene	**************************************	(S	10Y 5/1	
.5 2	5 10	0 50 1	9 - 10 - 10 - 00	**************************************	7 CC		» » » » » »		1	М		

			SIT	E 1020	HC	LE	B COR				CORED 150.3 - 159.8 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	\'	\geq	-	,			3				CLAY and CLAY WITH DIATOMS
}	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Assert of the second se	2	V V V V V V V V V V V V V V V V V V V	2		``````````````````````````````````````		S		Major Lithologies: This core consists of light grayish olive to grayish olive (10Y 5/1 to 10Y 4/1) CLAY and CLAY WITH DIATOMS containing about 15% diatoms. Color changes are subtle, gradual, and faintly mottled throughout. General Description:
}	MM		3	V V V V V V V V V V V V V V V V V V V	3		» » » » »			10Y 5/1	The sediment is slightly to moderately bioturbated. Zoophycos and Planolites are common. Note: Liner crushed in Section 4.
			5	9 9 9 9 9 9	4	late Pliocene	3 >>>	W	D		
			6 - 7	V V V V V V V V V V V V V V V V V V V	5		%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%		S		
}			8	V V V V V V V V V V V V V V V V V V V	6		⊕ % % %⊕ %∞ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		s _D	10Y 4/1	
		{	9 -	V	7 CC		@ » ~ ~ ~ ~ ~ ~ ~		М		
) 2	8 10 (0 50 1	00	V	_	_		_			1

GRAPF dereity (yc)—S) (490-200m) (10-6 S) (10-6

			SIT	E 1020		LE	B COF		19X		CORED 169.3 - 178.9 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
fr			1	₩ <u></u> -	1		***************************************			10Y 4/2	CLAY and NANNOFOSSIL CLAY MIXED SEDIMENT WITH DIATOMS Major Lithology: This core consists of grayish olive (10Y 4/1 to 10Y 4/2) CLAY and olive gray (5Y 5/2 to 5Y 4/2) NANNOFOSSIL CLAY MIXED
	}	{	2	V 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2		*** ** ** **	1		5Y 4/2	SEDIMENT WITH DIATOMS. General Description: The sediment is slightly to moderately biotubated. Zoophycos occurs at
}			3					1		10Y 4/2	severals intervals in Sections 3, 4, and 5.
}		}	4		3		}} }} }} }		SDD	5Y 4/2 10Y 4/1	
}				v <u></u>		ocene	>>> >>> >> >> >>	1		10Y 4/2	
}		{	5		4	late Pliocene	}}} }}		S D D	5Y 5/2	
		{	6				}} }} }} }			5Y 4/2	
}		}	7		5		} } }			10Y 4/2 10Y 4/1	
{		{	-				3			5Y 4/2	
}		}	<u>8</u> -	X 1.1.11 .	6		3	<u> </u>		10Y 4/2	
{		{	9		7		} }	1		10Y 4/1	
1 1.5	5 10	0 25 5	- 50		СС		}	1	М	10Y 4/2	

		SIT	E 1020	HO	LE	B COR	E 2	20X		CORED 178.9 - 188.5 mbsf
GRAPE density (g/cm ³)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1 1.5	2 10 2	1		1 CC	late Pliocene		× × × × × × × × × × × × × × × × × × ×	M	10Y 5/1	CLAY Major Lithology: This core consists of grayish olive (10Y 5/1) CLAY. General Description: Note: This entire core consists of drilling breccia. No structural features are discernable and stratigraphy is uncertain.

GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	B COR Structure	urb	Sample	Color	CORED 188.5 - 198.1 mbsf Description
	(450-500 nm)		(a) (b) (b) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d		1 2 3 3 4 4 5 5 6 6	late Pliocene Ag	***	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0 0 - 0 Sam	10Y 4/1 5Y 4/2 10Y 4/1	CLAY WITH DIATOMS and DIATOM CLAY WITH NANNOFOSSILS Major Lithologies: This core consists of grayish olive (10Y 4/1) CLAY WITH DIATOMS and olive gray (5Y 4/2) DIATOM CLAY WITH NANNOFOSSILS. All lithologies contain ~5% foraminifers. General Description: The core is highly fractured and pervasively biscuited by XCB coring. ~50% of the core is pulverized interbiscuit slurry. Slight bioturbation and vein structures are displayed on some of the coherent biscuits.

			SI	ΓΕ 1020		LE	B COR		22X		CORED 198.1 - 207.7 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			2	<u> </u>	1		» » » » » •	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$		5Y 4/1	DIATOM CLAY and CLAY WITH DIATOMS Major Lithologies: This core consists of gray (5Y 5/1) DIATOM CLAY and dark gray (5Y 4/1) to grayish olive (10Y 4/1) CLAY WITH DIATOMS. Pyritized burrows and small concretions are distributed throughout. Sponge fragments are present in Section 6. General Description: This core is greatly disturbed by
- Monday - Market - M		J. M. J. W. W. J. W. W. J. W. J. W. W. W. W. J. W. W. J. W. W. W. J. W.	4	<u> </u>	3	late Pliocene	» » » »	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	S	5Y 5/1	fracturing and biscuiting. Approximately 50% is pulverized to interbiscuit slurry. Slight bioturbation is evident throughout.
			6		5		}	$\wedge \wedge \wedge \wedge \wedge \wedge \wedge$		5Y 4/1 5Y 5/1	
			8	74777477777777777777777777777777777777	6		} } } }	<u> </u>	S	5Y 4/1 10Y 4/1	
1.4 1.6	5 10 5	5 10 1	15	77.77	7 CC			> ×	М	5Y 4/1	

			SIT	E 1020		LE	в со	OR	Ε :	23X			CORED 207.7 - 217.3 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structu	ıre	Disturb	Sample		Color	Description
			1	V	1		3	* •	\times \wedge	s s	D	10Y 6/1	CLAY, CLAY NANNOFOSSIL MIXED SEDIMENT WITH DIATOMS and CLAY WITH DIATOMS Major Lithologies: This core consists of dark gray (5Y 4/1) to grayish olive (10Y 4/1) CLAY and CLAY WITH DIATOMS, and light
		}	2		2		3	×\$c	$\times \wedge \wedge \wedge \wedge$	S	D	5Y 4/1	grayish olive (10Y 5/1) to pale olive (10Y 6/1) CLAY NANNOFOSSIL MIXED SEDIMENT WITH DIATOMS. General Description:
			3	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	3	Pliocene	3	*	$^{\prime\prime}$			10Y 4/1	The core is badly fractured and biscuited by XCB coring. Slight to moderate bioturbation is displayed in the 50% of the core not completely pulverized. Vein structures are distributed through the core, as are pyritized burrows.
			6		5	late Pli	***	(A) (A) (A) (A) (A)	\^^^^\^\\			5Y 5/1	
1.5 1.75	5 10 0	20 4	8	V	6 7 CC		,,,	(P) %	$\backslash \land	M		10Y 4/1	

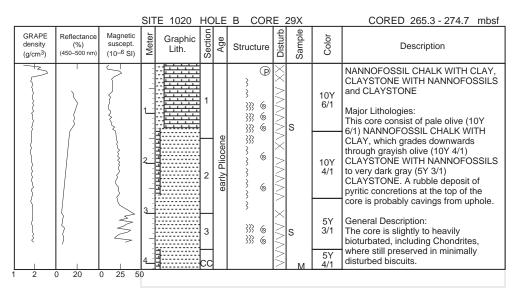
1020B-24X NO RECOVERY

			SIT	TE 1020		LE	В	COR	Ε :	25X		CORED 227.0 - 236.6 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Str	ucture	Disturb	Sample	Color	Description
(g/cm³)		Month of the state	2 3 4 5 7 8		3 3 4 4 5 5 6 6 7 7 CCC	late Pliocene	歌 歌歌 一	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	<u> </u>	S S I S S	5Y 4/1 5Y 5/1 10Y 6/1 10Y 6/1 10Y 6/1	NANNOFOSSIL CLAYSTONE and NANNOFOSSIL CHALK WITH DIATOMS AND CLAY Major Lithologies: This core consists of grayish olive (10Y 4/1) NANNOFOSSIL CLAYSTONE with gradational compositions to pale olive (10Y 6/1) to very light gray (10Y 7/1) NANNOFOSSIL CHALK WITH DIATOMS AND CLAY. General Description: The sediments are moderately bioturbated throughout and display abundant Chondrites, Planolites, and Zoophycos trace fossils. The core is pervasively biscuited and fractured throughout. Vein structures are visible in some biscuits.

	CORED 236.6 - 246.3 mbsf
GRAPE density (g/cm³) (450–500 nm) (10–6 Sl) Graphic Lith.	Description
2 2 2 3 3 4 5 6 6 7 7 5 6 6 7 7 7 7 7 7 7 7 7 7 7 7	MITH DIATOMS, CLAY NANNOFOSSIL MIXED SEDIMENT and CLAY WITH VITRIC ASH Major Lithologies: This core consists of interbedded light gray (5Y 7/1) to pale olive (10Y 6/1) CLAYEY NANNOFOSSIL CHALK WITH DIATOMS, light gray (5Y 6/1) to pale olive (10Y 6/1) CLAY NANNOFOSSIL MIXED SEDIMENT, and grayish olive (10Y 4/1) CLAY WITH VITRIC ASH. Centimeter-scale pyritic concretions are distributed throughout. Minor Lithology: A thin, graded bed of dark gray (N4) VITRIC ASH is present near the base of Section 3. Its top is bioturbated by Chondrites. General Description: The sediments are heavily bioturbated through most of the core. The core is badly fractured and biscuited.

			SIT	TE 1020		LE	B COR		27X		CORED 246.3 - 255.9 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			1		1		— ;;; (P) ;;; (S) ;;; (S) ;;; (S) ;;; (S) ;;; (S) ;;; (S) ;;; (S) ;;; (S) ;;; (S) ;;; (S) ;;	$\wedge \wedge \wedge \wedge \wedge \wedge \wedge \wedge \wedge \wedge$	S	10Y 5/1	NANNOFOSSIL CHALK WITH CLAY and NANNOFOSSIL CLAYSTONE Major Lithologies: This core consists of light gray (5Y 6/1 to 5Y 7/2) NANNOFOSSIL CHALK WITH CLAY and light grayish olive (10Y 5/1) NANNOFOSSIL
			3		3	early Pliocene	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	\^^^^^^\	Ø	5Y 7/2	CLAYSTONE. Pyritic layers are present in Sections 1 and 6. General Description: The core is severely fractured and biscuited by XCB coring. The core is homogeneous to heavily bioturbated. Chondrites and Zoophycos are common.
			6				§	$\wedge \wedge \wedge \wedge \wedge$		5Y 6/1	
			7		5		} }	\^^\^\\	S	5Y 7/1	
		}	9		7			\times \vee		5Y 6/1	
1.6 1.8	10 20 0	0 10 2	20	∓	CC			×	М	5/1	

GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10-6 SI)	Meter	E 1020 Graphic Lith.	Section		B COR Structure	Disturb	Sample	Color	CORED 255.9 - 265.3 mbsf Description
two			3		1 2 2 3 3 5 5 6 6 7 7 CCC	early Pliocene		$\times\times$		5Y 6/1 5Y 5/1 5Y 6/1 5Y 5/1 5Y 5/1	NANNOFOSSIL CHALK WITH CLAY and CLAYSTONE WITH NANNOFOSSILS Major Lithologies: This core consists of interbedded grayish olive (10Y 4/1) CLAYSTONE WITH NANNOFOSSILS to gray (5Y 6/1) NANNOFOSSIL CHALK WITH CLAY. General Description: The core is badly fractured and biscuited by XCB coring. Moderate bioturbation of the sediment includes Chondrites and Zoophycos trace fossils. There are numerous pyritic concretions included in the sediment and accumulated at the top of the core as probable cavings.

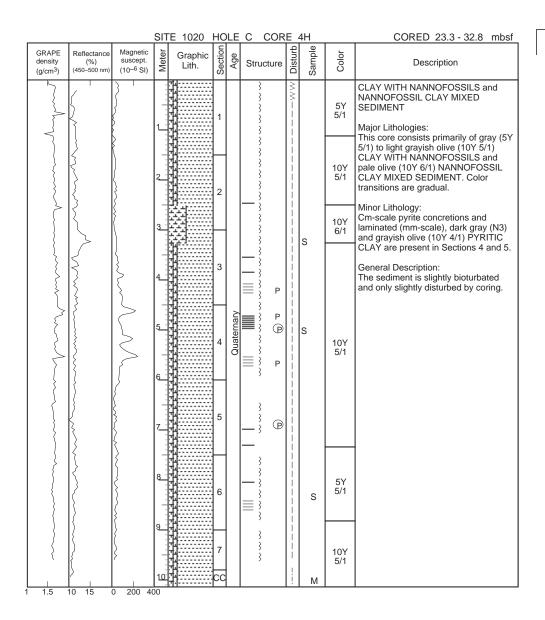


	5	SITE 1020	HC	LE	B COR	Ε;	30X		CORED 274.7 - 278.8 mbsf
density	Magnetic suscept. (10 ⁻⁶ SI)	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
*	\{				33 6	\times		N5	CLAYSTONE WITH NANNOFOSSILS, CLAYSTONE and AMYGDALOIDAL
1.5 2 2.5	0 50	2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 CC	early Pliocene	% 6 % 6 % 8 % 8 % 8 % 6 % 8	<u> </u>	SMD	5GY 5/2	BASALT Major Lithologies: This core consists gray (N5) to dark greenish gray (5GY 5/2) CLAYSTONE WITH NANNOFOSSILS overlying dark gray (N3) volcaniclastic(?) CLAYSTONE, and brecciated dark gray (N3) AMYGDALOIDAL BASALT. General Description: The core is badly fractured and crushed by coring. Moderate bioturbation and Chondrites trace fossils are evident on larger pieces of sedimentary rock.

			SIT	E 1020	HC	LE	C COR	E	1H		CORED 0.0 - 4.3 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1 1.5	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	0 200 4	3 3		1 2	Quaternary	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		S S	10Y 4/2 To 5Y 4/2	CLAY WITH SILT Major Lithology: The core is composed of grayish olive (10Y 4/2) to olive gray (5Y 4/2 to 5/2) CLAY WITH SILT. The color changes are subtle gradational. Minor Lithologies: One to 15 cm-thick, medium gray (N5) SILT WITH CLAY to SILTY CLAY with a sharp basal contact and upwards color grading occurs in the middle part of the core. General Description: The core is slightly to moderately bioturbated. Dark greenish mottles are observed in the lower half of the core.

			SIT	E 1020	НС	LE	C COR				CORED 4.3 - 13.8 mbs
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
~~\^\~~		- ~~~~~~~~~			1		***************************************				CLAY Major Lithology: This core is composed of light grayish olive (10Y 5/2 to 5/1) CLAY. The color changes are very subtle and gradational.
Mann	}		2		2		** ** ** ** ** ** ** ** ** ** ** ** **			10Y 5/2	Minor Lithologies: Pale olive (10Y 6/1) CLAY WITH SILT AND CARBONATE occurs in the middle part of the core. A thin PYRITIC QUARTZ SAND occurs in Section 5, 6 cm.
3		}					» }}				General Description: The core is moderately bioturbated and
			4		3	rnary	» » »		s	10Y 6/1	mottled. Moderate disturbance in Section 2.
}	}		5			Quaternary	>> >> >> >> >>				
}	}	***	-		4		>>> >>> >>> >>>				
\\\ \	}	X	6		5				S	10Y	
	}		7		3		** ** **		S	5/2 To 10Y 5/1	
	\\ \	}	8_		6		@ *************				
{	}	(9		7		}} }} }}		.,		
.4 1.6	5 10	0 100 2	00		i.C			<u>'</u>	<u> </u>		I

			SIT	E 1020	НО	LE	C COR	E :	3H		CORED 13.8 - 23.3 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	- Maryany Maryany Maryany 12	0 100 20	3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -		1 2 2 3 3 4 4 5 5 6 6 CC	Quaternary	(P)	/www	s s	10Y 5/1	CLAY WITH SILT Major Lithology: This core is composed of light grayish olive (10Y 5/1) CLAY WITH SILT. Minor Lithology: A pocket of dark greenish gray CLAY WITH GLAUCONITE occurs in Section 2, 117 cm. General Description: The core is slightly mottled to homogeneous, probably due to moderate bioturbation.



GRAPE (Seminary (1974 S)) GRAPE (Seminary (1974 S)) GRAPE (Seminary (1974 S)) GRAPE (Seminary (1974 S)) Graphic (1974 S)) Graphic (1974 S) Major Lithologies: This core consists of gray (57 S/1) CLAY WITH NANNOFOSSILS and grayish oile (1974 LAYE) Graphic (1974 S) Graphic (1974 S)				SIT	E 1020	HC)LE	C COR	Е	5H		CORED 32.8 - 42.3 mbsf
S CLAY Major Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSILS and grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSILS and grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSIL Sand grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSIL Sand grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSIL Sand grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSIL Sand grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSIL Sand grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSIL Sand grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSIL Sand grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSIL Sand grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSIL Sand grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSIL Sand grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSIL Sand grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSIL Sand grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSIL Sand grayish olive (10Y	density	Reflectance (%) (450–500 nm)	Magnetic suscept.	$\overline{}$	Graphic	Section	Age		Disturb	Sample	Color	
7 = 3 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1 5/1	density (g/cm³)	Reflectance (%) (450–500 nm)	suscept. (10 °F SI)	1 2 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Graphic Lith.	3				s	5Y 5/1 10Y 4/1 5Y 5/1 10Y 4/1	CLAY WITH NANNOFOSSILS and CLAY Major Lithologies: This core consists of gray (5Y 5/1) CLAY WITH NANNOFOSSILS and grayish olive (10Y 4/1) CLAY. Minor Lithologies: This core contains some laminations of CLAY WITH PYRITE and an interval of light grayish olive (10Y 5/1) CLAYEY NANNOFOSSIL OOZE in Section 5. General Description: The core is homogeneous to slightly bioturbated. A few pyrite concretions
				9		7		- } ≡ }				
	1.6 1.8	10 12.5 -1	0 30 7			100	1			M		

GRAPE density (g/cm³) (450-500 nm) (10 ⁻⁶ SI) Graphic (g/cm³) Structure (g/cm²) Structure (g/cm²) CLAYEY NANNOFOSSIL OOZ NANNOFOSSIL OOZE WITH (G/cm²) STructure (g/cm²) Stru	
Major Lithologies: This core consists of gray (5Y pale olive (10Y 6/1) CLAYEY NANNOFOSSIL OOZE and	6/1) to
NANNOFOSSIL OOZE WITH (5/1 Diatoms and foraminifers comp	
homogeneous to slightly biotur 5Y 5/1 Disseminated pyrite and pyritic concretions are present in this	
s loy 5/1	
>	
\$\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	
S 10Y 5/1	
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
1.7 0 10 -10 20 50	

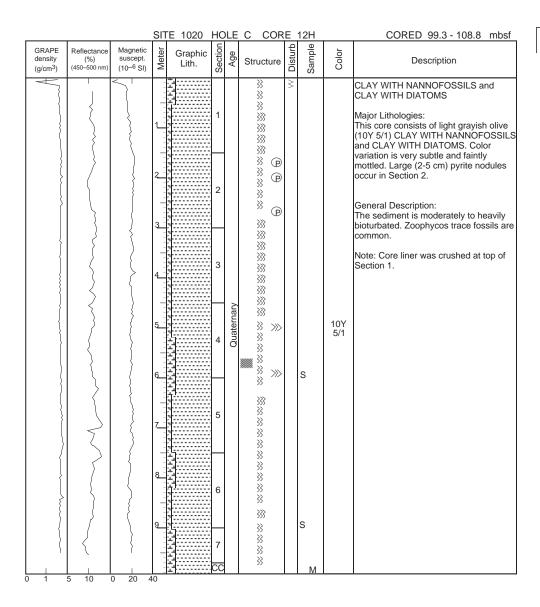
			SIT	E 1020	HO	LE	C COR				CORED 51.8 - 61.3 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		MANNE AMMININE	2 3		2		######################################	000		10Y 5/1	CLAY WITH DIATOMS and CLAY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS Major Lithologies: This core consists of gray (5Y 5/1) CLAY WITH DIATOMS and light grayish olive to pale olive (10Y 5/1 to 10Y 6/1) CLAY NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS. Pyrite concretions are present in Sections 2 and 3. General Description: The sediments are extensively mottled or bioturbated throughout. Chondrites and Zoophycos trace fossils are present.
}			4		3		3		S	10Y 6/1	
			5		4	Quaternary				10Y 5/1	
1.5 1.75	0 10 -1	M/h/	6		5 6 7		- ***********************************		S	5Y 5/1	

			SIT	E 1020	НО	LE	C COR				CORED 61.3 - 70.8 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
3	15	7	-	-			}	>			NANNOFOSSIL CLAY and CLAY
					1		······································	- M	S		Major Lithologies: This core consists of gray (5Y 5/1) NANNOFOSSIL CLAY and CLAY. The sediment contains infrequent darker gray pyritic patches and a cm- scale pyrite concretion in Section 1.
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	MANAMAN	3		2		» » » » » » »			5Y 5/1	Minor Lithology: Four cm-scale, graded laminations of gray (N4) FELDSPAR QUARTZ SILTY SAND occur at Section 5, 71- 77 cm. Faint, cm-scale laminations in the fine-grained sediment overlying the sand from 51 to 71 cm may also be turbiditic in origin.
			4 - - - - 5		3	Quaternary	» » » » » »				General Description: The sediments are slightly bioturbated throughout the core and more clearly defined at the turbidite in Section 5 where Chondrites are present.
		MMM	6		4	Que	~~~				Note: Section 7 has a collapsed liner.
}	}	2	-					1		N4	
			7		5 6		<u>**</u> *** *** *** *** *** *** *** *** ***		S	5Y 5/1	
		7	-		7						
1 2	5 10 -1	0 20 5	50		UU				IVI		<u> </u>

			SIT	E 1020	HC	LE	C COR		9H		CORED 70.8 - 80.3 mbsf
GRAPE density (g/cm ³ )	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	A	MWW LAW MANNER	2		3	Quaternary	P	M	S	10Y 5/1	CLAY, CLAY WITH NANNOFOSSILS OR DIATOMS and DOLOMITE CLAY MIXED SEDIMENT  Major Lithologies: This core consists chiefly of light grayish olive (10Y 5/1) CLAY, grayish olive (10Y 4/1) to gray (5Y 5/1) CLAY WITH NANNOFOSSILS OR DIATOMS, and gray (5Y 5/1) DOLOMITE CLAY MIXED SEDIMENT. Pyritic concretions and isolated greenish-brown laminations occur throughout the core.  Minor Lithology: A light olive gray (5Y 6/2) bed of moderately cemented DOLOMITE occurs in Section 6.  General Description: The core is moderately bioturbated with appearances of Chondrites and Planolites trace fossils.  Note: Section 7 has a collapsed liner.
			6		5		}			5Y 5/1	
}			-				—		S	10Y 5/1	
		MUM	8 -		6		<b>-</b>		S	5Y 5/1	
1.5 2	5 10 -10	0 15 4	10		7 CC		} } }	w	M	10Y 4/1	

			SIT	E 1020	НС	LE	C COR		10H		CORED 80.3 - 89.8 mbsf
GRAPE density (g/cm ³ )	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			2		3	Quaternary	<b>-</b>	0000	O	10Y 5/1	DIATOM CLAY and NANNOFOSSIL CLAY MIXED SEDIMENT  Major Lithologies: This core consists of light grayish olive (10Y 5/1) to gray (5Y 5/1) DIATOM CLAY and NANNOFOSSIL CLAY MIXED SEDIMENT. Sponges are present in Sections 4 and 7. A 1-cm pyritic concretion is present at the base of Section 7.  General Description: The sediments are homogeneous to moderately bioturbated.
			7		5		% % % %			5Y 5/1	
1 1.5	5 10	0 25 5	8 10		6 7		**************************************		S	10Y 5/1	

			SIT	TE 1020		LE	C COR	Ε	11H		CORED 89.8 - 99.3 mbsf
GRAPE density (g/cm ³ )	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
-m/m//mm/mm/			1		1		**************************************		8	10Y 6/1	CLAY  Major Lithology: This core consists of pale olive to light grayish olive (10Y 6/1 to 10Y 5/1) CLAY. Color changes are subtle and faintly mottled throughout. Silt content increases slightly near the base of the core.  General Description: The sediment is moderately bioturbated.
Marin Mayan Mananan Jah			4		5	Quaternary	**************************************		<i>S</i> ≥	10Y 5/1	



2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3				SIT	E 1020		LE	C COR		13H		CORED 108.8 - 118.3 mbsf
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	density	(%)	suscept.	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
The sediment is moderately to hear bioturbated. Zoophycos trace fossion are common.    A		}	~~~~	1		1		» » » » »				MIXED SEDIMENT  Major Lithologies: This core consists of light grayish olive (10Y 5/1) CLAY gradationally
The sediment is moderately to hear bioturbated. Zoophycos trace fossion are common.    A			}	2_				>>> >>> >>> >>>			6/1	SEDIMENT. Color is faintly mottled with greenish hues throughout the
The sediment is moderately to hear bioturbated. Zoophycos trace fossion are common.    A	{		{	-	4	2		\$\$\$ \$\$\$			5/1	•
10Y 5/1  10Y 6/1		\{	3_				\$\$\$ }} ??				The sediment is moderately to heavily bioturbated. Zoophycos trace fossils	
5 5 3 3 P S 10Y 6/1 S 10Y 5/1 S 7 7 S P S 10Y 5/1		}		4_		3						are common.
5 5 3 3 P S 10Y 6/1 S 10Y 5/1 S 7 7 S P S 10Y 5/1	{	{					У					
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	5		4	Quaternar			S		
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			}	7		5		≫ ≫ ≫ ≫ ≫		S		
								}}} }}				
1.5 2 5 10 10 20 30	1.5.2	F 40	10 20 1	10		СС		33		М		

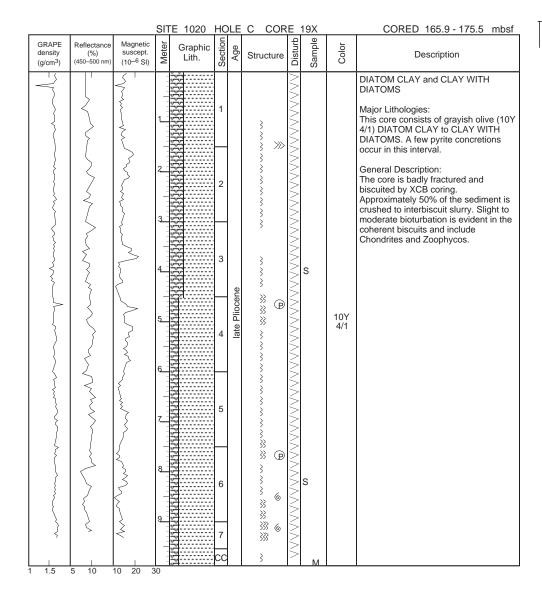
GRAPE (Spen) Reflectance (%) (Spen) (10-6 st) Early (10-6 st)
S and an annofossil content. Several large nodules of pyrite are found throughout the core.  General Description: The sediment is moderately to heavily bioturbated.  Note: The core liner collapsed in Section 7.
7 3 P M M CCC

			SIT	E 1020		LE	C COR		15H		CORED 127.8 - 137.3 mbsf
density	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
M				Ž	1			$\forall \dashv \dashv \wedge$		10Y 4/1	CLAY WITH DIATOMS and DIATOM CLAY MIXED SEDIMENT WITH NANNOFOSSILS
			2	XX	2		» » » » » »	\	S	10Y 4/1 To 10Y 5/1	Major Lithologies: This core consists of grayish olive to light grayish olive (10Y 4/1 to 10Y 5/1) CLAY WITH DIATOMS and olive gray (5Y 5/2) DIATOM CLAY MIXED SEDIMENT WITH NANNOFOSSILS. Color and compositional changes are gradual.
}			3		4		***************************************		S	5Y 5/2	General Description: The sediment is heavily bioturbated with Zoophycos trace fossils abundant.  Note: No stratigraphic orientation to material in Section 1. The core liner in
			5		5 6 CC	Quaternary	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		М	10Y 5/1	the top part of Section 2 is collapsed.

			SIT	E 1020	HO	LE	C COR	Е	16H		CORED 137.3 - 146.8 mbsf
GRAPE density (g/cm ³ )	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			10 10 10 10 10 10 10 10 10 10 10 10 10 1		1 2 2 3 3 4 4 5 5 6 6 7 7 CCC	late Pliocene -Quaternary	** ** ** ** ** ** ** ** ** ** ** ** **		s s	10Y 4/1 To 5/2	CLAY WITH DIATOMS  Major Lithology: This core consists of CLAY WITH DIATOMS. Color variation is faintly mottled between grayish olive to olive gray (10Y 4/1 to 5Y 5/2) with no distinct color layers. Several small faults occur throughout the core.  General Description: The sediment is moderately to heavily bioturbated.  Note: Expanded material from Section 2 is boxed separately from the core.

			SIT	E 1020	HC	LE	C COR	Ε	17X		CORED 146.8 - 156.3 mbsf
GRAPE density (g/cm ³ )	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			2	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	2		(P)	$\wedge \wedge $	S	5GY 4/1	CLAY WITH DIATOMS and NANNOFOSSIL CLAY MIXED SEDIMENT WITH DIATOMS AND FORAMINIFERS  Major Lithologies: This core consists of dark greenish gray (567 4/1) to dark gray (5Y 4/1) CLAY WITH DIATOMS and NANNOFOSSIL CLAY MIXED SEDIMENT WITH DIATOMS AND FORAMINIFERS. A pyrite concretion occurs near the top of Section 1.  General Description: The core is severely disturbed by XCB
			4		3	late Pliocene	3	$\overline{\wedge}$	S	5Y 4/1	coring. It is pervasively biscuited and even the biscuits are extensively fractured.
		\ \ \ \ \ \	7		5		% % % % % % % % %	$\sim \sim $		10Y 4/1	
1.4 1.6	5 10 0	50 1	9 -	15-15-15-15-15-15-15-15-15-15-15-15-15-1	7 CC		>>>	$\langle \rangle \rangle \times $	M	5Y 4/1	

			SIT	E 1020	HC	LE	C COR	_	18X		CORED 156.3 - 165.9 mbs
GRAPE density (g/cm ³ )	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			1	2	1		} } %	XXXXXXX	S	5Y 4/1	CLAY WITH DIATOMS and DIATOM CLAY  Major Lithologies: This core consists of dark gray (5Y 4, to grayish olive (10Y 4/1) CLAY WITH DIATOMS to DIATOM CLAY. Pyritic
	\ \ \ \	}	2		2		% 6 P % %	$\times \times $			concretions are present at several locations in the core.  General Description: This core is badly fractured and biscuited, thus obliterating many primary sedimentary features. Bioturbation is heavy where
January My			4	×	3	ine		$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$		10Y 4/1	discernible, especially in Sections 2, and 6. Zoophycos and Chondrites ar present.
			5	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4	late Pliocene	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	^^^^^^^			
			7	V V V V V V V V V V V V V V V V V V V	5		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\^^\^\\\\	S		
~~~~~~			8	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	6		** ** ** ** ** ** **	$\wedge \wedge $		5Y 4/1	
}	}	{	9	A.	7 CC		}} }} }} §	$\overline{\vee \vee \vee \vee \vee}$	М		



	SI	ΓΕ 1020	HC	<u>LE</u>	C COR				CORED 175.5 - 185.1 mbsf
GRAPE density (%) Magnetic suscept. (10 ⁻⁶ SI)	et	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 2 3 5 5 7 7		1 2 3 4	late Pliocene Ag	Structure (P) (P) (P) (S) (S) (S) (S) (S) (S) (S) (S) (S) (S		Sam Sam Sam Sam	50 10Y 4/1 10Y 5/1 10Y 4/1 5Y 5/1 5Y 4/1 5Y 5/1	Description DIATOM CLAY Major Lithology: This core consists of grayish olive (10Y 4/1) to gray (5Y 5/1) DIATOM CLAY. Pyritic concretions are distributed throughout. Minor Lithologies: A multilayer, laminated, graded bed of gray (N5) to very light gray (N8) VITRIC ASH WITH PYRITE is present in Section 5. Light olive gray (5Y 5/2) to light grayish olive (10Y 5/1) CLAY WITH DIATOMS, FORAMINIFERS OR VOLCANIC GLASS is also present in this core. General Description: The core is slightly less fractured and biscuited than overlying cores. Bioturbation and vein structures are present.
	8_	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	6		}}	<u> </u>		5Y 4/1	

			SIT	E 1020	HC)LE	C COR	Ε 2	21X		CORED 185.1 - 194.7 mbsf	
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	urb	Sample	Color	Description	
Marry		}	1	1313131313131313131313131313131313131313	1		}}}	XX/\/\		10Y 5/1	CLAY and CLAY WITH DIATOMS OR NANNOFOSSILS Major Lithologies: This core consists predominantly of dark	
			2					$\wedge \wedge \wedge \wedge \wedge \wedge$		5Y 5/1	gray (5Y 4/1) CLAY and gray (5Y 5/1) to light grayish olive (10Y 5/1) CLAY WITH DIATOMS OR NANNOFOSSILS. Pyritic concretions and vein structures are common.	
{	}				2		}} }} }}	\perp		10Y 5/1	Minor Lithology: A sub-meter bed of olive gray (5Y 5/2) DOLOMITIC CLAY occurs in the upper	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	}	{	3	77 77 72	_		} } ***	> > >	S	5Y 5/2	half of the core.  General Description:	
www.mlwww.			4		3	late Pliocene	\$ \$ \$\$\$\$\$ P 6 \$ \$ \$\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \		Ø	5Y 4/1	The sediment is slightly to heavily bioturbated, and includes some Chondrites and Zoophycos trace fossils.	
.5 1.75	5 10	0 20	(a) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	V	6 7 CC		3 3 3 3 3 3 3 3 3	$\times$	M	10Y 4/1		

			SIT	E 1020		LE	C COR		22X		CORED 194.7 - 204.3 mbsf
GRAPE density (g/cm ³ )	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
5			-	~~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				$\times$		5Y 4/2	DIATOM CLAY and DIATOM CLAY MIXED SEDIMENT
			1_	5	1					5Y 4/1	Major Lithologies: This core consists of olive (5Y 4/3) to olive gray (5Y 4/2) DIATOM CLAY MIXED SEDIMENT and grayish olive (10Y 4/1) DIATOM CLAY. Vein
	$ $	2	2		0		33 33	$\perp$ $\perp$ $\perp$		5Y 4/3	structures and pyrite concretions are common.
		}	3		2		** ** ** P			5Y 4/2	General Description: This core is moderately bioturbated throughout and includes some Chondrites and Planolites trace
}			-		3		% % % %	Ţ	S	5Y 4/3	fossils.
}		}	-			Pliocene	» ⊕ » **	1			
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			5 - - -	77777777	4	late Plic	% % % %			5Y 4/2	
}	$  \langle \rangle  $	{	6				}} }} }}	<u> </u>			
			7 7 -	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	5		**************************************			10Y	
			8 - -	7777777	6		** ** ** ** **	11111111		4/1	
1 2	5 10 0	0 10 2	9 -		7 CC		}} 6	$\perp$	S M		

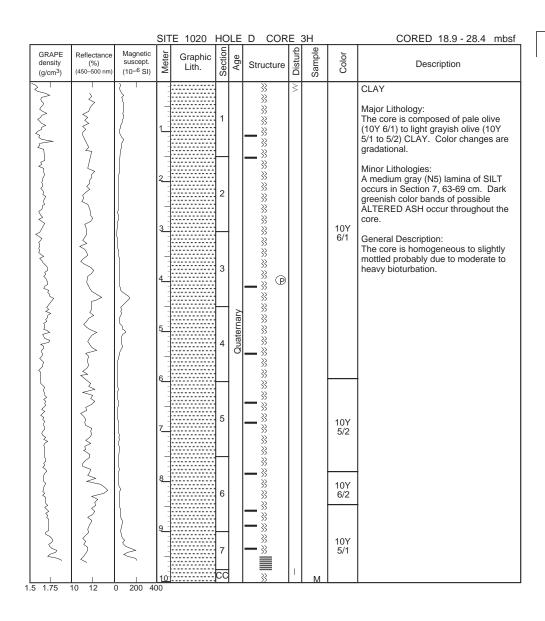
		SIT	E 1020	НО	LE	C COR	E 2	23X		CORED 204.3 - 213.9 mbsf
GRAPE Reflectance (%) (g/cm³) (450–500 nm	suscept.	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		2		1 2 2 3 3 4 4 5 5 6 6 7 7 CCC	late Pliocene	®	$\langle VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV$	o o	5Y 4/1 10Y 5/1 5Y 5/1 5Y 5/2 5Y 5/2	DIATOM CLAY MIXED SEDIMENT, NANNOFOSSIL DIATOM CLAY MIXED SEDIMENT and CLAY WITH DIATOMS  Major Lithologies: This core consists of gray (5Y 5/1) to light grayish olive (10Y 5/1) DIATOM CLAY MIXED SEDIMENT and NANNOFOSSIL DIATOM CLAY MIXED SEDIMENT. There is also a lesser amount of dark gray (5Y 4/1) CLAY WITH DIATOMS. Pyrite concretions are scattered throughout, but the accumulation of pyritic rubble at the top of the core is probably cavings from uphole.  General Description: The core is heavily fractured and biscuited. Overall, the core is slightly bioturbated, but burrowing is intense in places.
1 1.5 5 10	0 10 2	20	of H	_				IVI		

			SIT	E 1020	HC	LE	С	COR		24X		CORED 213.9 - 223.5 mbsf
GRAPE density (g/cm ³ )	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Stru	ucture	Disturb	Sample	Color	Description
			1	× × × × × × × × × × × × × × × × × × ×	1			P * *	XXHHHHH		10Y 4/1	DIATOM CLAY MIXED SEDIMENT and CLAY WITH DIATOMS  Major Lithologies: This core consists of light grayish olive (10Y 5/1) DIATOM CLAY MIXED SEDIMENT to dark gray (5Y 4/1)CLAY
			2	35555555555555555555555555555555555555	2		*		+		5Y 4/1	WITH DIATOMS. Vein structures and pyrite concretions are distributed throughout the core.  General Description: The sediments are slightly to heavily
			3	15151515151515151515151515151515151515	3	ne		% 6 % *** *** *** *** *** *** ** ** ** ** **		S	10Y 5/1	bioturbated, with Chondrites, Planolites, and Zoophycos burrows being especially distinct in Sections 1 and 3.
			5	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4	late Pliocene		}} 6 }	-VVVVVV+		10Y 4/1	
	5 7.5 0	1000 20	8		5 6 7 CC			3 33 33 33 33 33 33 34 34 34 34 34 34 34	$\downarrow$	S	5Y 4/1	

			SIT	E 1020	HO	LE	C COR		25X		CORED 223.5 - 233.2 mbsf
GRAPE density (g/cm ³ )	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
An war			2 3		2			$\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash\vdash$	<i>S</i>	5Y 4/1	CLAY WITH DIATOMS and NANNOFOSSIL CLAY MIXED SEDIMENT WITH DIATOMS  Major Lithologies: This core consists of dark gray (5Y 4/1) CLAY WITH DIATOMS and light grayish olive (10Y 5/1) NANNOFOSSIL CLAY MIXED SEDIMENT WITH DIATOMS. Well developed vein structures and pyrite nodules are common throughout the core.  General Description: The sediment is moderately bioturbated. Chondrites are abundant.
1.5 1.75	5 10	0 20 4	4		3 4 5 6 7 CC	late Pliocene	%% \$\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	+++++++++++++++++++++++++++++++++++++++	S	10Y 5/1	bioturbated. Chondrites are abundant.

			SIT	E 1020			D COR	E :			CORED 0.0 - 9.4 mbsf
GRAPE density (g/cm ³ )	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
density	(%)	suscept.	Meter		1 2 Section	Quaternary Age	**************************************	→ Disturb	Sample	5Y 5/3 5Y 5/3 10Y 5/1 To 10Y 5/2	Description  CLAY  Major Lithology: This core is composed of light grayish olive (10Y 5/1 to 5/2) CLAY. Color changes are subtle and gradational.  Minor Lithology: Three thin medium gray (N5) color graded layers of NANNOFOSSIL CLAY occur in the middle of Section 3.  General Description: The core is homogeneous to slightly mottled probably due to moderate to heavy bioturbation.
1 1.5	5 10	0 200 4	8		6 7 CC		% % % % %	!	M		

			SIT	E 1020			D COR	E:			CORED 9.4 - 18.9 mbsf
GRAPE density (g/cm ³ )	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
~~~~~		}	1		1		» » » » »	W 0		10Y 4/2	CLAY and CLAY WITH DIATOMS  Major Lithologies: This core consists of light grayish olive (10Y 4/2 to 5/1) CLAY and olive gray (5Y 5/2) CLAY WITH DIATOMS.
			3_		2		• • • • • • • • • • • • • • • • • • •			10Y 5/1	Minor Lithologies: Pale olive (10Y 6/1) CLAY WITH SILT AND CARBONATE occurs in the upper part of the Section 4. General Description: The sediment is slightly bioturbated. Chondrites burrows occur in the middle of Section 1.
			4	Y	3	ry	** ** ** ** **			5Y 5/2 10Y 5/1	initially of Section 1.
{	}		5		4	Quaternary	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			10Y 6/1	
}			7		5		» »			10Y 5/1	
}			8 -		6		» » » » » »			- 5/ I	
1.5	5 10	0 100 2	10		7 CC		} } }	>	M		



			SIT	E 1020	НΟ	LE	D COR	Ε	1H		CORED 28.4 - 37.9 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			3		2	LÀ	**************************************	M		10Y 5/2	CLAY Major Lithology: This core consists of light grayish olive to grayish olive (10Y 5/2 to 10Y 4/2) CLAY. Minor Lithologies: Dark greenish color bands of possible ALTERED ASH occur throughout the Sections 2 and 6. General Description: The core is moderately bioturbated.
			5		4	Quaternary	» » »			5Y 5/2	
1.4 1.6		0 50 1	6		5 6		**************************************	W	М	10Y 5/2	

			SIT	E 1020	HC	LE	D COR				CORED 37.9 - 47.4 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			1		1		>> >> >> >> >> >> >> >> >> >> >> >> >>	W		10Y 6/1	NANNOFOSSIL CLAY Major Lithology: This core consists of light grayish olive to pale olive (10Y 5/1 to 10Y 6/1) NANNOFOSSIL CLAY. Color is faintly mottled and changes gradationally throughout the core.
			3		3	Quaternary	**************************************			10Y 6/2	Minor Lithologies: Three thin layers of black FINE SAND occur in Section 3, 5-8 cm. General Description: The sediment is moderately to heavily bioturbated.
\		}	6			ā	}}} }} }}			10Y 7/2	
			8 -		6		® ® ® ® ® ® ® ® ® ® ® ® ® ®			10Y 5/2 To 10Y 5/1	
1 1.5	10 15	0 50 10	10 00	2	СС		\$\$ }}		М		

			SIT	E 1020	HO	LE	D COR	Ε 6	3H		CORED 47.4 - 56.9 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age		Disturb	Sample	Color	Description
			3		2		xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	M		10Y 4/1	CLAYEY NANNOFOSSIL OOZE and NANNOFOSSIL CLAY Major Lithologies: This core consists of alternations between grayish olive to pale olive (10Y 4/1 to10Y 6/1) CLAYEY NANNOFOSSIL OOZE and NANNOFOSSIL CLAY. Color changes are gradational. Pyrite nodules are abundant throughout the core. General Description: The sediment is moderately bioturbated.
}		{	4		3		33 33 22			5/1 10Y	
}		\{	5			rnary	°≈≈ ∞≈≈			6/1 10Y 5/1	
			6		5	Quaternary) @ @			10Y 4/1	
}	$ \rangle $	5	8		6		;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;			10Y 5/1	
			9		7 CC		% % % % %		М	10Y 4/1	
1.5 1.75	5 10 1	0 20 3	30						IVI		1

			SIT	E 1020	HC	LE	D COR				CORED 56.9 - 66.4 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
3	'\	7					}} >> p				NANNOFOSSIL CLAY
					1					10Y 5/1	Major Lithology: This core consists of light grayish olive to pale olive (10Y 5/1 to 10Y 6/1) NANNOFOSSIL CLAY. Color changes gradationally and is mottled throughout the core.
	}		2		2		*** *** *** ***				Minor Lithologies: A thin layer of laminated dark gray (N3) FINE SAND occurs in Section CC, 24- 29 cm.
			3		3		@ \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$				General Description: The sediment is moderately to heavily bioturbated throughout most of the core but decreases near the base.
			5		4	Quaternary	**************************************			10Y 6/1	
			7		5		% % % % % % % % % % % % % %				
			(°		6		**************************************				
		}			7		;; ;;				
1.5 1.75	/ 1 5 10 1	0 20 3	10 30		cc		- }		М	10Y 4/1	

			SIT	E 1020	НΟ	LE	D COR	Ε 8	3H		CORED 66.4 - 75.9 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	- MMMM	James Market Mar	1		1		**************************************	**		10Y 4/2	CLAY WITH NANNOFOSSILS and NANNOFOSSIL CLAY Major Lithologies: This core consists of grayish olive (10Y 4/2) NANNOFOSSIL CLAY and olive gray (5Y 5/2) CLAY WITH NANNOFOSSILS. Color changes are subtle and gradational. Small (0.5 cm) pyrite nodules occur throughout the core. Minor Lithologies: Section 1, 30-38 cm, contains a graded bed of fine SAND.
			4	라 14	3		** ** ** •			5Y 5/2	General Description: The sediment is moderately bioturbated.
						ary	\$\$ }} }}			10Y 4/2	
		Many	5		4	Quaternary	» » » »			5Y 5/2	
1.5 2	8 10 1	5 20 2	8 - 9 -		5 6 7			M	M	10Y 4/2	

		SIT	ΓΕ 1020	HC	LE	D CC)R				CORED 75.9 - 85.4 mb
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Meter	Graphic Lith.	Section	Age	Structur	re	Disturb	Sample	Color	Description
		1	1 0	1		> > > >				5Y 5/1	CLAY WITH DIATOMS OR NANNOFOSSILS, DOLOMITE CLAY MIXED SEDIMENT and CLAY Major Lithologies:
		2				3	Р			10Y 5/1	This core consists of gray (5Y 5/1) to light grayish olive (10Y 5/1) CLAY WITH DIATOMS OR NANNOFOSSILS, dark greenish gray (5GY 4/1) CLAY, and gray (5Y 5/1) DOLOMITE CLAY MIXED
		3		2			P			5Y 5/1	DOLOMITE CLAY MIXED SEDIMENT. Disseminated pyrite and pyritic concretions are distributed throughout.
		4		3		***				10Y 5/1	General Description: The core is slightly bioturbated and recovered with only moderate disturbance.
		5_	7 <u>4</u> 774		Quaternary	} }				5Y 6/1	
		6		4	Qua	}				5Y	
		7	4 0	5		}	P P			5/1	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		8_				» » » » » »				10Y	
<u> </u>		9_	1 N	6		3				5/1	
		10	7 7	7			P			5GY 4/1	
1.6 1.8 9	9 11.5	14	/ <u></u>	CC				!	М		

			SIT	E 1020	HC	LE	D COR	E	10H		CORED 85.4 - 94.9 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			2	**************************************	2		> > > > > > > > > > > > > > >	www		5GY 5/1 To 10Y 5/1 5Y 6/1 10Y 5/1 5Y 5/1	DIATOM CLAY and CLAY WITH DIATOMS OR NANNOFOSSILS Major Lithologies: This core consists of greenish gray (5GY 5/1) to light gray (5F 6/1) DIATOM CLAY and CLAY WITH DIATOMS OR NANNOFOSSILS. Pyritic concretions are distributed throughout. General Description: The core is homogeneous to slightly bioturbated.
			5		3 4 5	Quaternary	» »»»»» »»»»» (10Y 5/1	
			9	× v v v v v v v v v v v v v v v v v v v	7					5GY 5/1	
1.5 2	5 10	10 20 3	1 <u>0</u>	X	cc		(P)	≷	М	10Y 4/1	

			SIT	E 1020	НО	LE	D COR	E ′	11H		CORED 94.9 - 104.4 mbs
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	미	Sample	Color	Description
			1	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	1		P	00 %		10Y 5/1	CLAY WITH DIATOMS Major Lithologies: This core consists of gray (5Y 5/1) to grayish olive (10Y 5/1) CLAY WITH DIATOMS. Pyritic concretions are present in 3 locations. Sponges
		3	2				P	 		5Y 5/1	(Sagarites?) present in Sections 2 and 4.
		marine proposition of the second seco	3,		2 3 4 5 6 7 CC	Quaternary	(P)	M	M	10Y 5/1	General Description: The core is homogeneous with no distinct evidence of burrows.
1.5 2	5 10 1	5 20 2	 5	-		_			141		ı

			SIT	E 1020	HC	LE	D COR	Е	12H		CORED 104.4 - 113.9 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	urb	Sample	Color	Description
		- Manual	3, 3, 4		3	Quaternary	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			5Y 5/1 10Y 5/1 5/1	CLAY WITH DIATOMS OR NANNOFOSSILS and CLAY Major Lithologies: This core consists of mottled dark gray (5Y 4/1) to light grayish olive (10Y 5/1) CLAY and CLAY WITH DIATOMS OR NANNOFOSSILS. Small sponges are distributed throughout. General Description: The sediments are homogeneous to indistinctly mottled and slightly bioturbated. Note: Liner collapsed at the top of Section 1.
}			6		5					10Y 5/1	
	5 10 1	5 20	8 - 9		6 7 CC		33333		M	5Y 4/1	

			SIT	TE 1020	HC	LE	D COR	E	13H		CORED 113.9 - 118.2 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
- 1.8	5 10 1	0 20 3	2		1 2 CC	Quaternary	P	M M	M	5GY 4/1	CLAY Major Lithology: This core consists of dark greenish gray (5GY 4/1) CLAY. The core is mottled throughout, but displays no distinct burrows. Pyrite is disseminated in the CLAY and forms a concretion near the top of the core. General Description: Recovery is low in this core because of hard dolomite occurring at the top of the next core.
 0 1.0	J 10 1	0 20 3	U								

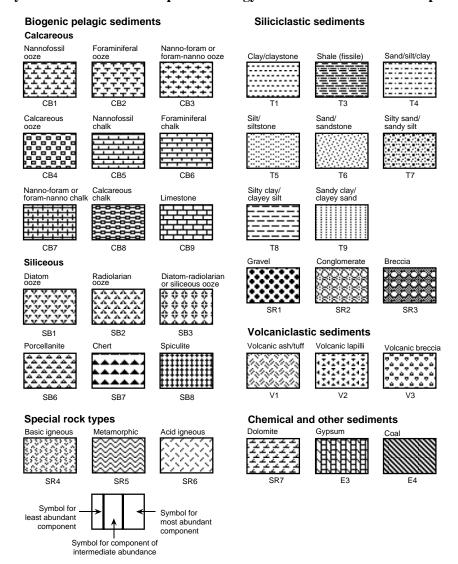
			SIT	E 1020	HC	LE	D COR		14H		CORED 118.2 - 127.7 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
7~~			1		1		•	0000		5GY 4/1	CLAY WITH DIATOMS and CLAY Major Lithologies: This core primarily consists of dark greenish gray (5GY 4/1) to gray (5Y 5/1) CLAY WITH DIATOMS and CLAY. Pyritic concretions are scattered throughout the sediment.
			3 4		3		(P) (D) (P)		C	10Y 4/1	Minor Lithology: Small fragments of very dark grayish brown (2.5Y 3/2) DOLOSTONE nodules are located in the core and at the top where they probably caved-in from above. General Description: The sediments are homogeneous to slightly burrowed.
			5 6 7 7		4	Quaternary			SW	5GY 4/1	
			8	X)	6		» » » •	. —		5Y 5/1	
1 2	5 10 () 500 10	9 -		7 CC		, ,		М	5GY 4/1	

CLAY WITH DIATOMS and DIATOM CLAY MIXED SEDIMENT WITH NANNOFOSSILS Major Lithologies: This core consists of dark greenish gray (5GV 4/1) to gray (5V 5/1) CLAY WITH DIATOMS and DIATOM CLAY MIXED SEDIMENT WITH NANNOFOSSILS. Pyritic nodules and sponges are distributed throughout the core. General Description: The sediments are homogeneous to moderately bioturbated.				SIT	TE 1020	НС	LE	D CO	RE	15H		CORED 127.7 - 137.2 mbsf
CLAY MIXED SEDIMENT WITH NANNOFOSSILS. Major Lithologies: This core consists of dark greenish gray (SGY 4/1) to gray (SG	density	(%)	suscept.	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
A Total Part of the control of the c					× × × × × × × × × × × × × × × × × × ×	1		** ** ** **				CLAY MIXED SEDIMENT WITH NANNOFOSSILS Major Lithologies: This core consists of dark greenish gray (5GY 4/1) to gray (5Y 5/1) CLAY
A A NO Segy 4/1			 	2 -		2		æ			5Y 5/1	MIXED SEDIMENT WITH NANNOFOSSILS. Pyritic nodules and sponges are distributed throughout the core. General Description: The sediments are homogeneous to
				7		5	Quaternary	(E) (P) (P) (P) (P) (P) (P) (P) (P) (P) (P				moderately bioturbated.

			SIT	E 1020		LE	D COR		16H		CORED 137.2 - 146.7 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			1	× × × × × × × × × × × × × × × × × × ×	1		} } } } } }	wwwww		5GY 4/1	CLAY WITH DIATOMS and DIATOM CLAY Major Lithologies: This core consists of dark greenish gray (5GY 4/1) to gray (10Y 5/1) CLAY WITH DIATOMS to DIATOM CLAY.
}		}	2	νν γγ γ)			* ~			10Y 5/1	Pyrite concretions and sponge spicule aggregates are distributed throughout the core.
			3		3	Quaternary-late Pliocene	®			5GY 4/1	General Description: The core is only slightly disturbed. The sediments are homogeneous to moderately burrowed.
			8		6 7		**	M	M	10Y 4/1	

			SIT	E 1020		LE	D COR		17H		CORED 146.7 - 156.2 mbsf
GRAPE density (g/cm ³)	Reflectance (%) (450–500 nm)	Magnetic suscept. (10 ⁻⁶ SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			2 3		1		P	WW		10Y 4/1	CLAY WITH DIATOMS Major Lithology: This core consists of dark greenish gray (5GY 4/1) to grayish olive (10Y 4/1) CLAY WITH DIATOMS. Pyrite concretions and small sponges are scattered throughout the core. General Description: The core is mostly homogeneous, but is moderately bioturbated in Section 4.
}			4	V V V V V V V V V V V V V V V V V V V	3	ne				5GY 4/1	
			5	V V V V V V V V V V V V V V V V V V V	4	late Pliocene	<pre></pre>			10Y 4/1	
}			7	× × × × × × × × × × × × × × × × × × ×	5		" (P)			5GY 4/1	
			8 - - -		6		(P)			10Y 4/1	
.5 2	8 10	0 25 5	9	, , , , , , , , , , , , , , , , , , ,	7 CC			 - - - -	M	5GY 4/1	

Key to symbols used in the "Graphic Lithology" column on the core description sheets.



Key to symbols used in the "Structures" column on the core description sheets.

		rilling disturbance rmbols	Sec	dimentary structures cont	•	
	_	Soft sediments				
	1	Slightly disturbed	↑F	Fining-upward sequence	♦	Isolated pebbles/cobbles
	1	Moderately disturbed	↑	Interval over which primary sedimentary structure occur	•	Isolated mud clasts
	į	Moderately disturbed	_	Planar laminae	_^_	Slump blocks or slump folds
	$\frac{2}{5}$	Highly disturbed	\geq	Wedge-planar laminae/beds	2	Contorted slump
	0		•••	Graded bedding (normal)	X	Probable compaction
	0	Soupy	•••	Graded bedding (reversed)	 	fracture
		Hard sediments		Sharp contact		Microfault (normal)
	\leq	Slightly fractured		Gradational contact	7/	Microfault (thrust)
			w	Scoured, sharp contact	_	Managerile
	王	Moderately fractured	•••	Scoured contact with graded bed	/	Macrofault
	\geq	Highly fragmented		Thick color bands (sharp contact)	>>	Fracture
	$\stackrel{\sim}{\sim}$	Drilling breccia	****	Thick color bands (gradational contact)	×	Totally fractured
	$\widehat{\times}$	Drilling breccia		Medium color bands (sharp contact)	X	Vein structures
ı	Sec	limentary structures	3000000 3000000	Medium color bands (gradational contact)	₹3	Color mottles
	}	Burrows, rare (<30% surface area)	\equiv	Thin color bands (sharp contact)	<u>-</u>	Dolomite nodule/concretion
	33	Burrows, common (30%–60% surface area)	*******	Thin color bands (gradational contact)	D	Disseminated dolomite
	333	Burrows, abundant (>60% surface area)		Laminations (mm scale)	P	Pyrite nodule/concretion
	>>>	Discrete Zoophycos trace fossil		Individual thick color band	Р	Disseminated pyrite
	6	Discrete Chondrites trace fossil		Individual medium color band Individual thin color band	G	Glauconite
	9	Sagarites sponge	—	Individual lamination	$ \bullet $	Concretions/nodules
	3	Gastropods	***	Wavy lamination		Dorito nodulo/conoration
	Ī	Other bivalves		Cross laminae	(Ba)	Barite nodule/concretion
		Chall fromments	<u>7</u> Z	Cross stratification	Ва	Disseminated barite
	8	Shell fragments	108U 77	Cross bedding	(Ca)	Calcite nodule/concretion
	#	Wood framents	ا تھار	Convoluted/contorted bedding Flaser bedding	(c)	Carbonate nodule/concretion
				Graded interval, normal		2 2 2 (3.1.)
				Veins	(Ch)	Chert nodule/concretion
			<	Water escape structure	A●	Ash/pumice pods
			7/	Scour	-A	Ashlayer